

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)
Christine DUPUIS	) Group Art Unit: 1617
Application No.: 09/663,183	) Examiner: A. Cotton
Filed: September 15, 2000	) ) )   Confirmation No.:  4212
For: COSMETIC COMPOSITION COMPRISING AT LEAST ONE SILICONE/ACRYLATE COPOLYMER AND AT LEAST ONE NONIONIC POLYMER COMPRISING AT LEAST ONE VINYLLACTAM UNIT	) ) ) ) ) )

Attention: Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

### **APPEAL BRIEF UNDER BOARD RULE § 41.37**

In support of the Notice of Appeal filed January 18, 2006, and further to Board Rule 41.37, and to the Notice of Panel Decision from Pre-Appeal Brief Review dated March 1, 2006, Appellant presents this brief and encloses herewith a check for the fee of \$500.00 required under 37 C.F.R. § 1.17(c). This Appeal Brief is being filed concurrently with a petition for an Extension of Time for three months, and the appropriate fee, extending the due date to July 1, 2006.

This Appeal responds to the July 19, 2005, final rejection of claims 1-33, 38-82, and 87-102.

If any additional fees are required or if the enclosed payment is insufficient,
Appellant requests that the required fees be charged to Deposit Account No. 06-0916.

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#### I. **REAL PARTY IN INTEREST**

L'Oréal S.A. is the real party in interest, as indicated by the assignment in its name, recorded at Reel 011422, Frame 0361.

Attorney Docket No.: 05725.0753-00

## II. RELATED APPEALS AND INTERFERENCES

In accordance with 37 C.F.R. § 41.37(c)(1)(ii), Appellant advises the Board of Patent Appeals and Interferences of the following pending appeals, interferences, or judicial proceedings which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the instant appeal.

## Application No. 09/663,168 (Attorney Docket No. 05725.0754):

A Notice of Appeal was filed January 18, 2006, along with a Pre-Appeal Brief Review. A Notice of Panel Decision from Pre-Appeal Brief Review dated March 1, 2006, was sent informing Appellant to proceed to the Board of Patent Appeals and Interferences. An Appeal Brief for this related application is being filed on the same day as the instant brief.

Attorney Docket No.: 05725.0753-00

# III. STATUS OF CLAIMS

Claims 1-33, 38-82, and 87-102 are pending and have been finally rejected by the Examiner. Appellant appeals the rejection of those claims.

Further to 37 C.F.R. § 41.37(c)(1)(iii), the attached Appendix contains a clean copy of the claims.

### **STATUS OF AMENDMENTS** IV.

All amendments have been entered. No amendments under 37 C.F.R. § 1.116 have been filed.

## V. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention relates to novel cosmetic compositions comprising at least one silicone/acrylate copolymer and at least one nonionic polymer comprising at least one vinyllactam unit. Specification as-filed at pg. 1, lines 5-7. The present invention also relates to cosmetic processes, such as processes for fixing and/or holding the hairstyle by using the inventive composition, as well as relates to processes for making cosmetic products comprising including in the products at least one composition according to the present invention. Specification as-filed at pg. 1, lines 7-10.

Hair products intended for shaping and/or holding the hairstyle which are commercially available can be in several forms, such as sprays, hair gels and mousses. Specification as-filed at pg. 1, lines 11-20. Hair spray compositions generally consist essentially of a solution, usually an alcoholic or aqueous solution, and one or more materials, such as polymeric resins, which are used to form welds between the materials (also called "fixing materials"). Specification as-filed at pg. 1, lines 13-16. Hair gels and mousses, which may also contain fixing materials, are generally applied to wet hair, and the drying or blow-drying of the hair after application can be used to shape and fix the hairstyle. Specification as-filed at pg. 1, lines 19-22.

These known hair styling compositions can adversely affect the cosmetic properties of the hair. Specification as-filed at pg. 1, lines 23-24. For example, the hair may become coarse, difficult to disentangle, it may lose its pleasant feel and appearance, or it may lack body. Specification as-filed at pg. 1, lines 24-25. In addition, these known hair compositions can also have the major drawback of resulting in a "powdering" effect. As used in the specification, "powdering" means the composition,

upon drying after application to the hair, forms a powder. Specification as-filed at pg. 2, lines 4-6. Needless to say, because this powder can then fall on the user's shoulders and clothing, or can attach to a comb or a brush, this powdering effect is considered a very undesireable drawback. Specification as-filed at pg. 2, lines 5-9.

Therefore, there is a need in the art for cosmetic compositions for styling the hair, which do not have one or all of the aforementioned disadvantages and which will fix the hairstyle well while affording good cosmetic properties. Specification as-filed at pg. 2, lines 10-13. Accordingly, the present invention relates to such compositions and processes for using them.

One subject of the present invention is a cosmetic composition comprising (a) at least one silicone/acrylate copolymer; and (b) at least one nonionic polymer comprising at least one vinyllactam unit chosen from polyvinylpyrrolidone/vinyl acetate/vinyl proprionate terpolymers, wherein the at least one silicone/acrylate copolymer is derived from radical-mediated polymerization of: (i) at least one ethylenically unsaturated monomer (a); and (ii) at least one silicone compound (b) comprising at least one oxyalklyene group. Specification at pg 2, lines 18-23; at pg. 14, lines 1-5; and at Claim 1. These compositions may further comprise at least one cosmetically acceptable medium. Specification at pg 2, lines 23-24.

The invention also relates to a process for holding or shaping a hairstyle comprising applying to hair an effective amount of a composition comprising (a) at least one silicone/acrylate copolymer; and (b) at least one nonionic polymer comprising at least one vinyllactam unit chosen from polyvinylpyrrolidone/vinyl acetate/vinyl proprionate terpolymers, wherein the at least one silicone/acrylate copolymer is derived

from radical-mediated polymerization of: (i) at least one ethylenically unsaturated monomer (a); and (ii) at least one silicone compound (b) comprising at least one oxyalklyene group. Specification at pg 2, lines 25-26; at pg. 14, lines 1-5; and at Claim 50.

The present invention still further relates to a process for making a cosmetic product comprising at least one composition comprising (a) at least one silicone/acrylate copolymer; and (b) at least one nonionic polymer comprising at least one vinyllactam unit chosen from polyvinylpyrrolidone/vinyl acetate/vinyl proprionate terpolymers, wherein the at least one silicone/acrylate copolymer is derived from radical-mediated polymerization of: (i) at least one ethylenically unsaturated monomer (a); and (ii) at least one silicone compound (b) comprising at least one oxyalklyene group.

Specification at pg 2, lines 18-23; at pg. 14, lines 1-5; and at Claim 98.

Finally, the present invention relates to cosmetic products for the hair, skin, nails, lips, eyebrows, and/or eyelashes comprising: (a) at least one silicone/acrylate copolymer; and (b) at least one nonionic polymer comprising at least one vinyllactam unit chosen from polyvinylpyrrolidone/vinyl acetate/vinyl proprionate terpolymers, wherein said the at least one silicone/acrylate copolymer is derived from radical-mediated polymerization of: (i) at least one ethylenically unsaturated monomer (a); and (ii) at least one silicone compound (b) comprising at least one oxyalklyene group.

Specification as-filed at pg. 2, line 25 - pg. 3, line 2; and at Claim 102.

Attorney Docket No.: 05725.0753-00

## VI. GROUNDS OF REJECTION

Claims 1-33, 38-82, and 87-102 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over WO 99/04750 to Blankenburg et al. ("Blankenburg") (English translation used) in view of U.S. Patent No. 5,297,566 to Firstenberg et al. ("Firstenberg").

Attorney Docket No.: 05725.0753-00

### VII. ARGUMENT

Each claim of the present application is separately patentable, and upon issuance of a patent will be entitled to a separate presumption of validity under 35 U.S.C. § 282. The arguments set forth below are arranged under separate subheadings, and in accordance with 37 C.F.R. § 41.37(c)(1)(vii) these subheadings indicate the claims that are argued separately.

The Examiner rejects claims 1-33, 38-82, and 87-102 under 35 U.S.C. § 103(a) as being unpatentable over Blankenburg in view of Firstenberg. *See* Final Office Action at 2. Appellant maintains that a prima facie case of obviousness has not been established for the reasons set forth below.

Several basic factual inquires must be made in order to determine the obviousness or non-obviousness of claims of a patent application under 35 U.S.C. § 103. These factual inquiries, set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 U.S.P.Q. 459, 467 (1966), require the Examiner to:

- (1) Determine the scope and content of the prior art;
- (2) Ascertain the differences between the prior art and the claims in issue:
- (3) Resolve the level of ordinary skill in the pertinent art; and
- (4) Evaluate evidence of secondary considerations.

The obviousness or nonobviousness of the claimed invention is then evaluated in view of the results of these inquiries. *Graham*, 383 U.S. at 17-18, 148 U.S.P.Q. 467.

Thus, in order to carry the initial burden of establishing a prima facie case of obviousness that satisfies the *Graham* standard, the Examiner must at least show that there is some suggestion or motivation, either in the references, or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. *In re* 

Rouffet, 149 F.3d 1350, 47 USPQ2d 1453 (Fed. Cir. 1998). "Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference." *In re Kotzab*, 217 F.3d 1365, 1370, 55 U.S.P.Q.2d 1313, 1316-17 (Fed. Cir. 2000) (citations omitted). In addition, the suggestion or motivation "must be found in the prior art reference, not in the Applicant's disclosure." *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991).

### A. Independent Claims 1, 50, 98, and 102

In the present case, the Examiner has not established a prima facie case of obviousness at least because she has not shown that the cited references provide the requisite teaching or suggestion that would motivate their combination to result in the invention as-recited in the independent claims.

The Examiner asserts that Blankenburg teaches "[a] water-dispersible polymer comprising ethylenically unsaturated monomers and polyalkylene oxide containing silicone derivatives." Office Action dated Feb. 8, 2005, at 2-3. According to the Examiner, Blankenburg is deficient only in that it "lacks polyvinylpyrrolidone/vinyl acetate/vinyl propionate terpolymers, preferred cosmetic mediums, and preferred percent weight." *Id.* at 3.

The Examiner cites Firstenberg in an attempt to cure the deficiencies of Blankenburg, asserting that "[v]inylpyrrolidone/vinyl acetate/vinyl propionate copolymer is taught and exemplified as a film forming and hair setting polymer useful in the invention disclosed by Firstenberg." *Id.* at 3-4 (citing Firstenberg at col. 2, lines 41-56; Example 9). The Examiner concludes that "[o]ne would have been motivated to add the

hair setting polymer vinylpyrrolidone/vinyl acetate/vinyl propionate copolymer of Firstenberg et al. to the composition of Blankenburg et al. because of an expectation of similar success in preparing a hair setting composition." Office Action dated Feb. 8, 2005, at 4. Appellant respectfully asserts that this conclusion is in error.

The standard in showing obviousness is not whether the references <u>can</u> be combined or modified -- this "does not render the resultant combination obvious unless the prior art also suggests the <u>desirability</u> of the combination." M.P.E.P. § 2143.01 (emphasis added) (citing *In re Mills*, 916 F.2d 680 (Fed Cir. 1990)). *See also In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984) ("The mere fact that the prior art could be so modified would not have made the modification obvious <u>unless the prior art suggested the desirability of the modification</u>.") (emphasis added).

1. The Examiner has not made a prima facie case of obviousness because neither Blankenburg nor Firstenburg suggest any desirability for modification

The Examiner contends that "(4) Blankenburg et al. teaches [sic] that other cosmetic agents can be added to his composition; and (5) Firstenberg et al. teaches that more than one hair setting polymer may be used in a hair setting composition." Office Action dated Feb. 8, 2005, at 4. In reality, neither Blankenburg nor Firstenberg suggest the desirability of modifying their respective disclosures to further include the ingredient of the other, which the Examiner wishes to combine.

For instance, not one of the 16 Examples of Firstenberg shows a composition with more than one film-forming polymer, notably this includes Example 9, which the Examiner relies upon for teaching and providing motivation for the combination of vinylpyrrolidone/vinyl acetate/vinyl propionate copolymers, with another film-forming

polymer. Further, the crux of the teaching of Firstenberg is a method and device for styling the hair, wherein the spray is applied at a certain force, or mass flow, over time. Accordingly, the Firstenberg disclosure teaches more about the mechanical properties of its invention, than about the components of the composition used in the method and device.

Moreover, in its discussion of the prior art uses of synthetic polymers for hairstyling, Blankenburg states that "[a]t first, vinyl lactam homopolymers and copolymers were preferred, but subsequently polymers containing carboxylate groups have become increasingly important." Blankenburg translation at page 1 (emphasis added). Such a statement at the very beginning of Blankenburg's disclosure indicates that the invention of Blankenburg is a departure from, and an alternative to, vinyl lactam copolymers. The Examiner attempts to rebut this argument by asserting that "[s]imply because Blankenburg et al. states that polymers containing carboxylate groups have become increasingly important does not mean that Blankenburg et al. is teaching that vinyl lactam polymers have become obsolete or even less important."

Office Action dated February 8, 2005, at 7.

Appellant respectfully submits that the issue is not whether vinyl lactam polymers are "obsolete or even less important," but whether Blankenburg teaches away from or discourages their use. The answer to this question is unequivocally yes, as vinyl lactam polymers are part of the art that the teaching of Blankenburg is seeking to avoid.

Accordingly, one of ordinary skill in the art would not have been motivated to use those same polymers in combination with Blankenburg. A reference should be considered as a whole, and portions arguing against or teaching away from the claimed invention must

also be considered. *See Bausch & Lomb, Inc. v. Barnes Hind/Hydrocurve, Inc.,* 796 F.2d 443 (Fed. Cir. 1986). "A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." *In re Gurley,* 27 F.3d 551 (Fed. Cir. 1994).

In response to the above arguments, the "Examiner does not agree that a person of ordinary skill in the art, upon reading the reference, would be discouraged from combining the vinylpyrrolidone/vinyl acetate/vinyl proprionate copolymer of F[i]rstenberg et al. with the polymers of Blankenburg et al. to arrive at a hair setting composition." Final Office Action at 3 (emphasis added).

Appellant respectfully asserts that the Examiner is now, in effect, turning the standard for finding prima facie obviousness on its head. The standard is not satisfied merely by stating that an artisan would not be discouraged from combining certain elements. Rather, the standard is for the Examiner to show that the references provide some motivation to result in a particular combination. In order to support a rejection under 35 U.S.C. § 103, "the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would [actively] select the elements from the cited prior art references for combination in the manner claimed." *In re Rouffet*, 149 F.3d at 1357, 47 U.S.P.Q.2d at 1458 (Fed. Cir. 1998) (emphasis added). The Examiner cannot pick and choose from a reference only the teachings that suit her purpose.

In the present case, the Examiner has not and cannot show that there is a suggestion or teaching in the combined references that would have motivated a person

of ordinary skill in the art to subsequently combine the disclosure of Firstenberg, which does not teach vinyllactam polymers with another film-forming polymer, and Blankenburg, clearly teaching an admitted preferred alternative to vinyl lactam copolymers. There is simply no motivation between the two references to make such a selection.

# 2. The Examiner has not made a prima facie case of obviousness because In re Kerkhoven is not applicable to the present facts

Finally, the Examiner attempts to rebut Appellant's argument that Blankenburg and Firstenberg do not teach the desirability of their combination by misapplying case law. Specifically, the Examiner asserts that Blankenburg and Firstenberg "both teach hair care fixative compositions in the for[m] of sprays," Office Action dated Feb. 8, 2005, at 4, and thus concludes that "[i]t is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose." Final Office Action at 2 (quoting *In re Kerkhoven*, 626 F.2d 846, 205 USPQ 1069 (CCPA 1980)).

Appellant maintains that *Kerkhoven* is not applicable to the present case.

In *Kerkhoven*, the claims at issue were directed to a process for forming a detergent, comprising forming two aqueous slurries, where one slurry was predominantly an anionic detergent and the other was primarily a nonionic detergent, independently or simultaneously drying the slurries, and mixing the resulting products. *See Kerkhoven*, 626 F.2d at 847, 205 USPQ at 1070. It was acknowledged that prior art detergents comprised a mixture of anionic fatty acid soaps, anionic detergents, and nonionic detergents. *Kerkhoven*, 626 F.2d at 848, 205 USPQ at 1071. To make the

known detergents, all of the ingredients were combined together in one slurry and then spray dried. *Id.* Therefore, the court agreed with the examiner's conclusion that the claims at issue required "*no more than the mixing together*" of two conventional detergents to make a third detergent composition set forth "prima facie obvious subject matter." *Kerkhoven*, 626 F.2d at 849, 205 USPQ at 1071 (emphasis added).

There are several key differences between the claimed invention and the invention at issue in *Kerkhoven*. Most notably, the end product in *Kerkhoven* was the same as the two combined ingredients: a detergent. In the claimed invention, the claimed elements are combined to create a solution that can be used to style hair. Moreover, a spray form is not required in the claimed invention. *See* as-filed specification at page 15, lines 9-14. How the individual constituents of the present invention react to form an end product is not akin to *Kerkhoven* and does not support the Examiner's conclusion of obviousness. This position is supported by the fact that the literal combination of Blankenburg and Firstenberg would not give rise to the claimed invention. Thus, the Examiner's application of *Kerkhoven* is inapposite to the present case.

## B. Dependent Claims 2-33, 38-49, 51-82, and 87-101

As discussed above, the Examiner has not shown and cannot show that one of ordinary skill in the art would be motivated to combine the elements cited by the Examiner in Blankenburg with Firstenburg, especially in view of the fact that Blankenburg teaches away from such a combination, to arrive at the invention recited in the independent claims. Since the Examiner has not shown the motivation necessary to establish a prima facie case of obviousness with respect to the limitations of the

independent claims, she cannot have established a prima facie case with respect to the dependent claims.

Accordingly, as the Examiner has failed to establish a prima facie case of obviousness, Appellant believes the Examiner's rejection to be improper and respectfully requests its reversal.

Thus, for at least the foregoing reasons, the rejection of claims 1-33, 38-82, and 87-102 is in error and Appellant respectfully requests its reversal.

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VIII. CONCLUSION

For the reasons given above, pending claims 1-33, 38-82, and 87-102 are

allowable and Appellant respectfully requests reversal of the Examiner's rejection. The

Examiner has failed to establish a prima facie case of obviousness at least because the

cited references do not provide motivation for, or suggest the desirability of, their

combination, as proffered by the Examiner.

To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain

entry of this Appeal Brief, such extension is hereby respectfully requested. If there are

any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith,

including any fees required for an extension of time under 37 C.F.R. § 1.136, please

charge such fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,

GARRETT & DUNNER, L.L.P.

Dated: June 29, 2006

Deborah M. Herzfeld

Reg. No. 52,211



Attorney Docket No.: 05725.0753-00

## Claims Appendix to Appeal Brief Under Rule 41.37(c)(1)(viii)

- 1. (Previously Presented) A composition comprising:
- (a) at least one silicone/acrylate copolymer; and
- (b) at least one nonionic polymer comprising at least one vinyllactam unit chosen from polyvinylpyrrolidone/vinyl acetate/vinyl proprionate terpolymers,

wherein said at least one silicone/acrylate copolymer is derived from radical-mediated polymerization of:

- (i) at least one ethylenically unsaturated monomer (a); and
- (ii) at least one silicone compound (b) comprising at least one oxyalklyene group.
- 2. (Original) A composition according to Claim 1 further comprising a cosmetically acceptable medium.
- 3. (Original) A composition according to Claim 1, wherein said at least one ethylenically unsaturated monomer (a) is chosen from at least one monomer of formula ( $I_a$ ):

in which:

- X is chosen from OH, OM, OR<sup>8</sup>, NH<sub>2</sub>, NHR<sup>8</sup> and N(R<sup>8</sup>)<sub>2</sub>, wherein:
- $R^8$ , which may be identical or different, are each chosen from hydrogen atoms, linear and branched  $C_1$  to  $C_{40}$  alkyl groups, optionally substituted with at least one group chosen from alkoxy groups, amino groups and carboxyl groups, monohydroxylated linear and branched  $C_1$  to  $C_{40}$  alkyl groups, optionally substituted with at least one group chosen from alkoxy groups, amino groups and carboxyl groups, polyhydroxylated linear and branched  $C_1$  to  $C_{40}$  alkyl groups, optionally substituted with at least one group chosen from alkoxy groups, amino groups and carboxyl groups, and hydroxylated polyethers; and
- M is chosen from Na<sup>+</sup>, K<sup>+</sup>, Mg<sup>+</sup>, NH<sup>4+</sup>, an alkylammonium group, a dialkylammonium group, a trialkylammonium group and a tetraalkylammonium group;

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- R<sup>6</sup> and R<sup>7</sup>, which may be identical or different, are each chosen from hydrogen atoms, linear and branched C<sub>1</sub> to C<sub>8</sub> alkyl groups, methoxy groups, ethoxy groups, 2-hydroxyethoxy groups, 2-methoxyethoxy groups, 2-ethoxyethyl groups, CN groups, COOH groups and COOM groups, wherein M is defined as above.

- 4. (Original) A composition according to Claim 3, wherein said linear and branched  $C_1$  to  $C_{40}$  alkyl groups optionally substituted with at least one group chosen from alkoxy groups, amino groups and carboxyl groups are each chosen from N,N-dimethylaminoethyl groups, 2-methoxyethyl groups, 2-ethoxyethyl groups, methoxypropyl groups and ethoxypropyl groups.
- 5. (Original) A composition according to Claim 3, wherein said monohydroxylated linear and branched  $C_1$  to  $C_{40}$  alkyl groups optionally substituted with at least one group chosen from alkoxy groups, amino groups and carboxyl groups are each chosen from 2-hydroxyethyl groups and hydroxypropyl groups.
- 6. (Original) A composition according to Claim 3, wherein said at least one monomer of formula (Ia) is chosen from acrylic acid, the salts of acrylic acid, esters and amides.
- 7. (Original) A composition according to Claim 3, wherein said at least one monomer of formula (la) is chosen from methacrylic acid, ethacrylic acid and 3-cyanoacrylic acid.
- 8. (Previously Presented) A composition according to Claim 3, wherein said at least one monomer of formula ( $I_a$ ) is chosen from esters obtained from linear  $C_1$  to  $C_{40}$  alkyls, branched  $C_3$  to  $C_{40}$  alkyls,  $C_3$  to  $C_{40}$  carboxylic alcohols, polyfunctional alcohols comprising 2 to 8 hydroxyl groups, alcohol ethers and polyalkylene glycols.
- 9. (Original) A composition according to Claim 8, wherein said polyfunctional alcohols comprising 2 to 8 hydroxyl groups are chosen from ethylene glycol, hexylene glycol, glycerol and 1,2,6-hexanetriol.
- 10. (Original) A composition according to Claim 8, wherein said alcohol ethers are chosen from methoxymethanol and ethoxyethanol.
- 11. (Original) A composition according to Claim 3, wherein said at least one monomer of formula (Ia) is chosen from N,N-dialkylaminoalkyl acrylates, N,N-dialkylaminoalkyl methacrylates, N-dialkylaminoalkyl acrylamides and N-dialkylaminoalkyl methacrylamides, wherein the amide group may optionally be unsubstituted, N-alkyl-monosubstituted, N-alkylamino-monosubstituted or N, N-dialkylamino-disubstituted, and wherein the alkyl moities are chosen from linear  $C_1$  to  $C_{40}$  alkyl moities and branched  $C_3$  to  $C_{40}$  alkyl moities.
- 12. (Previously Presented) A composition according to Claim 1, wherein said at least one ethylenically unsaturated monomer (a) is chosen from  $C_1$  to  $C_{40}$  vinyl esters,  $C_1$  to  $C_{40}$  allyl esters, linear  $C_3$  to  $C_{40}$  carboxylic acids, branched  $C_3$  to  $C_{40}$

carboxylic acids, vinyl halides, allyl halides, vinyllactams, heterocyclic compounds substituted with at least one group chosen from vinyl groups and allyl groups, N-vinylimidazoles, diallylamines, vinylidene chloride, carbon-based unsaturated compounds, acrylic acid compounds quaternized with epichlorohydrin and methacrylic acid compounds quaternized with epichlorohydrin.

- 13. (Original) A composition according to Claim 12, wherein said vinyllactams are chosen from vinylpyrrolidone and vinylcaprolactam.
- 14. (Original) A composition according to Claim 12, wherein said heterocyclic compounds substituted with at least one group chosen from vinyl groups and allyl groups are chosen from vinylpyridine, vinyloxazoline and allylpyridine.
- 15. (Original) A composition according to Claim 12, wherein said carbon-based unsaturated compounds are chosen from styrene and isoprene.
- 16. (Previously Presented) A composition according to Claim 1, wherein said at least one ethylenically unsaturated monomer (a) is chosen from N-vinylimidazoles, diallylamines, vinylidene chloride, carbon-based unsaturated compounds, acrylic acid compounds quaternized with epichlorohydrin and methacrylic acid compounds quaternized with epichlorohydrin.
- 17. (Original) A composition according to Claim 1, wherein said at least one ethylenically unsaturated monomers (a) is chosen from acrylic acid, methacrylic acid, ethacrylic acid, methyl acrylate, ethyl acrylate, propyl acrylate, n-butyl acrylate, isobutyl acrylate, t-butyl acrylate, 2-ethylhexyl acrylate, decyl acrylate, methyl methacrylate, ethyl methacrylate, propyl methacrylate, n-butyl methacrylate, isobutyl methacrylate, t-butyl methacrylate, 2-ethylhexyl methacrylate, decyl methacrylate, methyl ethacrylate, ethyl ethacrylate, propyl ethacrylate, n-butyl ethacrylate, isobutyl ethacrylate, t-butyl ethacrylate, 2-ethylhexyl ethacrylate, decyl ethacrylate, 2,3hydroxypropyl acrylate, 2,3-dihydroxypropyl methacrylate, 2-dihydroxyethyl acrylate, hydroxypropyl acrylate, 2-hydroxyethyl methacrylate, 2-hydroxyethyl ethacrylate, 2methoxyethyl acrylate, 2-ethoxyethyl methacrylate, 2-ethoxyethyl ethacrylate, hydroxypropyl methacrylate, glyceryl monoacrylate, glyceryl monomethacrylate, polyalkylene glycol (meth)acrylates, unsaturated sulphonic acids, acrylamide, methacrylamide, ethacrylamide, N,N-dimethylacrylamide, N-ethylacrylamide, Nethylmethacrylamide, 1-vinyl-imidazole, N,N-dimethylaminoethyl (meth)acrylate, maleic acid, fumaric acid, maleic anhydride, monoesters; of maleic anhydride, crotonic acid, itaconic acid, vinyl ethers, vinylformamide, vinylamine, vinylpyridine, vinylimidazole, vinylfuran, styrene, styryl sulphonate and allyl alcohol.
- 18. (Original) A composition according to Claim 1, wherein said at least one ethylenically unsaturated monomer (a) further comprises at least one entity chosen from silicon atoms, fluorine atoms and thio groups.

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19. (Previously Presented) A composition according to Claim 1, wherein said at least one silicone compound (b) is chosen from at least one derivative of formula I:

in which:

- x and y, which may be identical or different, are each chosen from integers wherein said integers are chosen such that the number average molecular weight of said at least one silicone/acrylate copolymer ranges from 300 to 30,000;
- $R_2$  and  $R_3$  , which may be identical or different, are each chosen from  $CH_3$  and groups of formula:

$$\begin{array}{c|c}
 & O \\
 & O \\
 & O \\
 & O \\
 & D
\end{array}$$

- in which:

- a and b, which may be identical or different, are each chosen from integers ranging from 0 to 50; -

R<sup>4</sup> is chosen from hydrogen, CH<sub>3</sub>, groups of formula:

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$$\begin{bmatrix}
R^{1} \\
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 X
\end{bmatrix}$$

$$\begin{bmatrix}
R^{1} \\
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 X
\end{bmatrix}$$

$$\begin{bmatrix}
R^{1} \\
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\end{bmatrix}$$

$$\begin{bmatrix}
R^{1} \\
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 X
\end{bmatrix}$$

### in which:

- x is an integer chosen such that the number average molecular weight of said at least one silicone/acrylate copolymer ranges from 300 to 30,000; and

-  $R^1$ , which may be identical or different, are each chosen from  $C_1$  to  $C_{20}$  aliphatic hydrocarbons,  $C_3$  to  $C_{20}$  aromatic groups,  $C_3$  to  $C_{20}$  cycloaliphatic hydrocarbons, groups comprising both aromatic groups and aliphatic groups and groups of formula:

$$-(CH_2)_n - O = O = O = O = O$$

in which:

- n is an integer ranging from 1 to 6;

- a and b, which may be identical or different, are each chosen from integers ranging from 0 to 50; and

- R<sup>4</sup> is defined as above; and groups of formula:

in which:

-  $R^6$  is chosen from a  $C_1$  to  $C_{40}$  group, optionally comprising at least one group chosen from amino groups, carboxyl groups and sulfonyl groups, and, if c is equal to zero,  $R_6$  is chosen from an anion of an inorganic acid; and

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### - c is equal to 0 or 1; and

-  $R^1$ , which may be identical or different, are each chosen from  $C_1$  to  $C_{20}$  aliphatic hydrocarbons,  $C_3$  to  $C_{20}$  aromatic groups,  $C_3$  to  $C_{20}$  cycloaliphatic hydrocarbons, groups comprising both aromatic groups and aliphatic groups and groups of formula:

$$-(CH_2)_n - O \longrightarrow O \longrightarrow D$$

in which:

- n is an integer ranging from 1 to 6;
- a and b, which may be identical or different, are each chosen from integers ranging from 0 to 50; and
- R<sup>4</sup> is defined as above;

with the proviso that said at least one silicone derivative (b) comprises at least one oxyalkylene unit.

- 20. (Original) A composition according to Claim 19, wherein said R<sup>1</sup>, which may be identical or different, are each chosen from methyl groups, ethyl groups, propyl groups, butyl groups, isobutyl groups, pentyl groups, isopentyl groups, hexyl groups, octyl groups, decyl groups, dodecyl groups, octadecyl groups, cycloaliphatic groups, aromatic groups and groups comprising both aromatic and aliphatic groups.
- 21. (Original) A composition according to Claim 20, wherein said cycloaliphatic groups are chosen from cyclohexyl groups.
- 22. (Original) A composition according to Claim 20, wherein said aromatic groups are chosen from phenyl groups and naphthyl groups.
- 23. (Original) A composition according to Claim 20, wherein said groups comprising both aromatic and aliphatic groups are chosen from benzyl groups, phenylethyl groups, tolyl groups and xylyl groups.
- 24. (Original) A composition according to Claim 19, wherein said R<sup>4</sup> is chosen from groups of formula -(CO)<sub>c</sub>-R<sup>6</sup>, wherein c is equal to 1 and R<sup>6</sup> is chosen from a group comprising from 1 to 40 carbon atoms, optionally comprising at least one group chosen from NH<sub>2</sub> groups, COOH groups and SO<sub>3</sub>H groups, wherein said group comprising from 1 to 40 carbon atoms is chosen from an alkyl group, a cycloalkyl group and an aryl group.

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25. (Original) A composition according to Claim 19, wherein said  $R^4$  is chosen from groups of formula -(CO)<sub>c</sub>,- $R^6$ , wherein c is equal to zero and  $R^6$  is chosen from phosphates and sulphates.

26. (Previously Presented) A composition according to Claim 1, wherein said at least one silicone compound (b) is chosen from at least one derivative of formula:

in which:

- x and y, which may be identical or different, are each chosen from integers wherein said integers are chosen such that the number average molecular weight of said at least one silicone/acrylate copolymer ranges from 300 to 30,000;
- $R^1$ , which may be identical or different, are each chosen from  $C_1$  to  $C_{20}$  aliphatic hydrocarbons,  $C_3$  to  $C_{20}$  aromatic groups,  $C_3$  to  $C_{20}$  cycloaliphatic hydrocarbons, groups comprising both aromatic groups and aliphatic groups and groups of formula:

$$-(CH_2)_n - O$$

$$a$$

$$b$$

in which:

- n is an integer ranging from 1 to 6;
- a and b, which may be identical or different, are each chosen from integers ranging from 0 to 50; and

R<sup>4</sup> is chosen from hydrogen, CH<sub>3</sub>, groups of formula:

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$$\begin{array}{c|c}
 & R^1 \\
 & R^1 \\
 & R^1
\end{array}$$

$$\begin{array}{c|c}
 & R^1 \\
 & R^1
\end{array}$$

$$\begin{array}{c|c}
 & R^1 \\
 & R^1
\end{array}$$

### in which:

- x is an integer chosen such that the number average molecular weight of said at least one silicone/acrylate copolymer ranges from 300 to 30,000; and

-  $R^1$ , which may be identical or different, are each chosen from  $C_1$  to  $C_{20}$  aliphatic hydrocarbons,  $C_3$  to  $C_{20}$  aromatic groups,  $C_3$  to  $C_{20}$  cycloaliphatic hydrocarbons, groups comprising both aromatic groups and aliphatic groups and groups of formula:

in which:

- n is an integer ranging from 1 to 6;

- a and b, which may be identical or different, are each chosen from integers ranging from 0 to 50; and

- R4 is defined as above; and

groups of formula:

$$\begin{array}{c}
\begin{pmatrix} O \\ \parallel \\ C \\ \end{pmatrix}_{c} \\
R^{6}$$

in which:

-  $R^6$  is chosen from a  $C_1$  to  $C_{40}$  group, optionally comprising at least one group chosen from amino groups, carboxyl

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groups and sulfonyl groups, and, if c is equal to zero, R<sub>6</sub> is chosen from an anion of an inorganic acid; and

- c is equal to 0 or 1; and

- R<sup>5</sup>, which may be identical or different, are each chosen from groups of formula:

$$-(CH_2)_n - O = O = O = O = O$$

in which:

- n is an integer ranging from 1 to 6;
- a and b, which may be identical or different, are each chosen from integers ranging from 0 to 50; and
- R<sup>4</sup> is defined as above;

with the proviso that said at least one silicone derivative (b) comprises at least one oxyalkylene unit.

- 27. (Previously Presented) A composition according to Claim 1, wherein said at least one silicone compound (b) is chosen from dimethicone copolyols and silicone surfactants.
- 28. (Previously Presented) A composition according to Claim 1, wherein said at least one silicone compound (b) is present in a proportion ranging from 0.1 % to 50% by weight relative to the total weight of said at least one silicone/acrylate copolymer.
- 29. (Previously Presented) A composition according to Claim 28, wherein said at least one silicone compound (b) is present in a proportion ranging from 1 % to 20% by weight relative to the total weight of said at least one silicone/acrylate copolymer.
- 30. (Original) A composition according to Claim 1, wherein said at least one silicone/acrylate copolymer is chosen from water-soluble silicone/acrylate copolymers and silicone/acrylate copolymers having a dispersibility in water is such that, in a water/ethanol mixture dosed at 50/50 by volume, said copolymers are soluble in a proportion of greater than 0.1 g/l.

31. (Original) A composition according to Claim 30, wherein said silicone/acrylate copolymers have a dispersibility in water such that said copolymers are soluble in a proportion of greater than 0.2 g/l.

- 32. (Original) A composition according to Claim 1, wherein said at least one silicone/acrylate copolymer is present in a proportion ranging from 0.1 % to 20% by weight relative to the total weight of said composition.
- 33. (Original) A composition according to Claim 32, wherein said at least one silicone/acrylate copolymer is present in a proportion ranging from 0.5% to 10% by weight relative to the total weight of said composition.

Claims 34-37 (Canceled).

- 38. (Original) A composition according to Claim 1, wherein said at least one non-ionic polymer comprising at least one vinyllactam unit has a number-average molecular mass greater than about 5000.
- 39. (Original) A composition according to Claim 38, wherein said number-average molecular mass ranges from about 10,000 to about 1,000,000.
- 40. (Original) A composition according to Claim 38, wherein said number-average molecular mass ranges from about 10,000 to about 100,000.
- 41. (Original) A composition according to Claim 1, wherein said at least one nonionic polymer comprising at least one vinyllactam unit is present in a proportion ranging from 0.1 % to 10% by weight relative to the total weight of said at least one silicone/acrylate copolymer.
- 42. (Original) A composition according to Claim 41, wherein said at least one nonionic polymer comprising at least one vinyllactam unit is present in a proportion ranging from 0.2% to 5% by weight relative to the total weight of said at least one silicone/acrylate copolymer.
- 43. (Original) A composition according to Claim 2, wherein said at least one cosmetically acceptable medium is chosen from water and cosmetically acceptable solvents.
- 44. (Original) A composition according to Claim 43, wherein said cosmetically acceptable solvents are chosen from alcohols and mixtures comprising water and at least one solvent.
- 45. (Original) A composition according to Claim 44, wherein said at least one solvent is chosen from  $C_1$ - $C_4$  alcohols.
- 46. (Original) A composition according to Claim 45, wherein said C<sub>1</sub>-C<sub>4</sub> alcohol is chosen from ethanol and isopropanol.

47. (Original) A composition according to Claim 46, wherein said C<sub>1</sub>-C<sub>4</sub> alcohol is chosen from ethanol.

- 48. (Original) A composition according to Claim 1 further comprising at least one suitable additive chosen from anionic surfactants, cationic surfactants, nonionic surfactants, amphoteric surfactants, fragrances, screening agents, preserving agents, proteins, vitamins, polymers different from said at least one silicone/acrylate copolymer and different from said at least one nonionic polymer defined in Claim 1, plant oils, mineral oils and synthetic oils.
- 49. (Original) A composition according to Claim 1, wherein said composition is a cosmetic composition.
- 50. (Previously Presented) A process for holding or shaping a hairstyle, comprising applying to hair an effective amount of a composition comprising:
  - (a) at least one silicone/acrylate copolymer; and
- (b) at least one nonionic polymer comprising at least one vinyllactam unit chosen from polyvinylpyrrolidone/vinyl acetate/vinyl proprionate terpolymers,

wherein said at least one silicone/acrylate copolymer is derived from radical-mediated polymerization of:

- (i) at least one ethylenically unsaturated monomer (a); and
- (ii) at least one silicone compound (b) comprising at least one oxyalklyene group.
- 51. (Original) A process according to Claim 50, wherein said composition further comprises a cosmetically acceptable medium.
- 52. (Original) A process according to Claim 50, wherein said at least one ethylenically unsaturated monomer (a) is chosen from at least one monomer of formula  $(I_a)$ :

$$X-C-CR^7=CHR^6$$
  $(I_a)$   $O$ 

in which:

- X is chosen from OH, OM, OR<sup>8</sup>, NH<sub>2</sub>, NHR<sup>8</sup> and N(R<sup>8</sup>)<sub>2</sub>, wherein:
- $R^8$ , which may be identical or different, are each chosen from hydrogen atoms, linear and branched  $C_1$  to  $C_{40}$  alkyl groups, optionally substituted with at least one group chosen from alkoxy groups, amino groups and carboxyl groups, monohydroxylated linear and branched  $C_1$  to  $C_{40}$  alkyl groups, optionally substituted with at least one group

chosen from alkoxy groups, amino groups and carboxyl groups, polyhydroxylated linear and branched  $C_1$  to  $C_{40}$  alkyl groups, optionally substituted with at least one group chosen from alkoxy groups, amino groups and carboxyl groups, and hydroxylated polyethers; and

- M is chosen from Na<sup>+</sup>, K<sup>+</sup>, Mg<sup>++</sup>, NH <sup>4+</sup>, an alkylammonium group, a dialkylammonium group, a trialkylammonium group and a tetraalkylammonium group;
- R<sup>7</sup> and R<sup>6</sup>, which may be identical or different, are each chosen from hydrogen atoms, linear and branched C<sub>1</sub> to C<sub>8</sub> alkyl groups, methoxy groups, ethoxy groups, 2-hydroxyethoxy groups, 2-methoxyethoxy groups, 2-ethoxyethyl groups, CN groups, COOH groups and COOM groups, wherein M is defined as above.
- 53. (Original) A process according to Claim 52, wherein said linear and branched C<sub>1</sub> to C<sub>40</sub> alkyl groups optionally substituted with at least one group chosen from alkoxy groups, amino groups and carboxyl groups are each chosen from N,N-dimethylaminoethyl groups, 2-methoxyethyl groups, 2-ethoxyethyl groups, methoxypropyl groups and ethoxypropyl groups.
- 54. (Original) A process according to Claim 52, wherein said monohydroxylated linear and branched  $C_1$  to  $C_{40}$  alkyl groups optionally substituted with at least one group chosen from alkoxy groups, amino groups and carboxyl groups are each chosen from 2-hydroxyethyl groups and hydroxypropyl groups.
- 55. (Original) A process according to Claim 52, wherein said at least one monomer of formula (la) is chosen from acrylic acid, the salts of acrylic acid, esters and amides.
- 56. (Original) A process according to Claim 52, wherein said at least one monomer of formula (la) is chosen from methacrylic acid, ethacrylic acid and 3-cyanoacrylic acid.
- 57. (Previously Presented) A composition according to Claim 52, wherein said at least one monomer of formula ( $I_a$ ) is chosen from esters obtained from linear  $C_1$  to  $C_{40}$  alkyls, branched  $C_3$  to  $C_{40}$  alkyls,  $C_3$  to  $C_{40}$  carboxylic alcohols, polyfunctional alcohols comprising 2 to 8 hydroxyl groups, alcohol ethers and polyalkylene glycols.
- 58. (Original) A process according to Claim 57, wherein said polyfunctional alcohols comprising 2 to 8 hydroxyl groups are chosen from ethylene glycol, hexylene glycol, glycerol and 1,2,6-hexanetriol.
- 59. (Original) A process according to Claim 57, wherein said alcohol ethers are chosen from methoxymethanol and ethoxyethanol.
- 60. (Original) A process according to Claim 52, wherein said at least one monomer of formula (la) is chosen from N,N-dialkylaminoalkyl acrylates, N,N-dialkylaminoalkyl methacrylates, N-dialkylaminoalkyl acrylamides and N-

dialkylaminoalkyl methacrylamides, wherein the amide group may optionally be unsubstituted, N-alkyl-monosubstituted, N-alkylamino-monosubstituted or N,N-dialkylamino-disubstituted, and wherein the alkyl moities are chosen from linear  $C_1$  to  $C_{40}$  alkyl moities and branched  $C_3$  to  $C_{40}$  alkyl moities.

- 61. (Previously Presented) A process according to Claim 50, wherein said at least one ethylenically unsaturated monomer (a) is chosen from  $C_1$  to  $C_{40}$  vinyl esters,  $C_1$  to  $C_{40}$  allyl esters, linear  $C_3$  to  $C_{40}$  carboxylic acids, branched  $C_3$  to  $C_{40}$  carboxylic acids, vinyl halides, allyl halides, vinyllactams, heterocyclic compounds substituted with at least one group chosen from vinyl groups and allyl groups, N-vinylimidazoles, diallylamines, vinylidene chloride, carbon-based unsaturated compounds, acrylic acid compounds quaternized with epichlorohydrin and methacrylic acid compounds quaternized with epichlorohydrin.
- 62. (Original) A process according to Claim 61, wherein said vinyllactams are chosen from vinylpyrrolidone and vinylcaprolactam.
- 63. (Original) A process according to Claim 61, wherein said heterocyclic compounds substituted with at least one group chosen from vinyl groups and allyl groups are chosen from vinylpyridine, vinyioxazoline and allylpyridine.
- 64. (Original) A process according to Claim 61, wherein said carbon-based unsaturated compounds are chosen from styrene and isoprene.
- 65. (Previously Presented) A composition according to Claim 50, wherein said at least one ethylenically unsaturated monomer (a) is chosen from N-vinylimidazoles, diallylamines, vinylidene chloride, carbon-based unsaturated compounds, acrylic acid compounds quaternized with epichlorohydrin and methacrylic acid compounds quaternized with epichlorohydrin.
- 66. (Original) A process according to Claim 50, wherein said at least one ethylenically unsaturated monomers (a) is chosen from acrylic acid, methacrylic acid, ethacrylic acid, methyl acrylate, ethyl acrylate, propyl acrylate, n-butyl acrylate, isobutyl acrylate, t-butyl acrylate, 2-ethylhexyl acrylate, decyl acrylate, methyl methacrylate, ethyl methacrylate, propyl methacrylate, n-butyl methacrylate, isobutyl methacrylate, tbutyl methacrylate, 2-ethylhexyl methacrylate, decyl methacrylate, methyl ethacrylate, ethyl ethacrylate, propyl ethacrylate, n-butyl ethacrylate, isobutyl ethacrylate, t-butyl ethacrylate, 2-ethylhexyl ethacrylate, decyl ethacrylate, 2,3-hydroxypropyl acrylate, 2,3dihydroxypropyl methacrylate, 2-dihydroxyethyl acrylate, hydroxypropyl acrylate, 2hydroxyethyl methacrylate, 2-hydroxyethyl ethacrylate, 2-methoxyethyl acrylate, 2ethoxyethyl methacrylate, 2-ethoxyethyl ethacrylate, hydroxypropyl methacrylate, glyceryl monoacrylate, glyceryl monomethacrylate, polyalkylene glycol (meth)acrylates. unsaturated sulphonic acids, acrylamide, methacrylamide, ethacrylamide, N,Ndimethylacrylamide, N-ethylacrylamide, N -ethyl methacrylamide, 1 -vinyl-imidazole, N,N-dimethylaminoethyl (meth)acrylate, maleic acid, fumaric acid, maleic anhydride. monoesters of maleic anhydride, crotonic acid, itaconic acid, vinyl ethers.

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vinylformamide, vinylamine, vinylpyridine, vinylimidazole, vinylfuran, styrene, styryl sulphonate and allyl alcohol.

67. (Original) A process according to Claim 50, wherein said at least one ethylenically unsaturated monomer (a) further comprises at least one entity chosen from silicon atoms, fluorine atoms and thio groups.

68. (Previously Presented) A process according to Claim 50, wherein said at least one silicone compound (b) is chosen from at least one derivative of formula I:

$$R^{3} \xrightarrow{S_{i} \to O} \xrightarrow{S_{i} \to O} \xrightarrow{S_{i} \to R^{2}} \qquad (I)$$

$$R^{1} \xrightarrow{R^{1}} \xrightarrow{R^{1}} \xrightarrow{R^{1}} \xrightarrow{R^{1}} \xrightarrow{X} \xrightarrow{Y}$$

in which:

- x and y, which may be identical or different, are each chosen from integers wherein said integers are chosen such that the number average molecular weight of said at least one silicone/acrylate copolymer ranges from 300 to 30,000;

- R<sup>2</sup> and R<sup>3</sup>, which may be identical or different, are each chosen from CH<sub>3</sub> and groups of formula:

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- in which:

- a and b, which may be identical or different, are each chosen from integers ranging from 0 to 50;

-  $R^4$  is chosen from hydrogen,  $CH_3$ , groups of formula:

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$$\begin{bmatrix}
R^1 \\
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 X
\end{bmatrix}$$

$$\begin{bmatrix}
R^1 \\
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 X
\end{bmatrix}$$

$$\begin{bmatrix}
R^1 \\
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 X
\end{bmatrix}$$

in which:

- x is an integer chosen such that the number average molecular weight of said at least one silicone/acrylate copolymer ranges from 300 to 30,000; and

 $R^1$ , which may be identical or different, are each chosen from  $C_1$  to  $C_{20}$  aliphatic hydrocarbons,  $C_3$  to  $C_{20}$  aromatic groups,  $C_3$  to  $C_{20}$  cycloaliphatic hydrocarbons, groups comprising both aromatic groups and aliphatic groups and groups of formula:

$$-(CH_2)_n - O = A^4$$

in which:

- n is an integer ranging from 1 to 6;
- a and b, which may be identical or different, are each chosen from integers ranging from 0 to 50; and
- R4 is defined as above; and

groups of formula:

$$\begin{array}{c}
\begin{pmatrix} C \\ \parallel \\ C \end{pmatrix} \\
C
\end{array}
= \mathbb{R}^{6}$$

in which:

- R<sup>6</sup> is chosen from a C<sub>1</sub> to C<sub>40</sub> group, optionally comprising at least one group chosen from amino groups, carboxyl groups and sulfonyl groups, and, if c is equal to zero, R6 is chosen from an anion of an inorganic acid; and

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### - c is equal to 0 or 1; and

-  $R^1$ , which may be identical or different, are each chosen from  $C_1$  to  $C_{20}$  aliphatic hydrocarbons,  $C_3$  to  $C_{20}$  aromatic groups,  $C_3$  to  $C_{20}$  cycloaliphatic hydrocarbons, groups comprising both aromatic groups and aliphatic groups and groups of formula:

$$-(CH_2)_n - O = O = O = O = O$$

in which:

- n is an integer ranging from 1 to 6;
- a and b, which may be identical or different, are each chosen from integers ranging from 0 to 50; and
- R<sup>4</sup> is defined as above;

with the proviso that said at least one silicone derivative (b) comprises at least one oxyalkylene unit.

- 69. (Original) A process according to Claim 68, wherein said R<sup>1</sup>, which may be identical or different, are each chosen from methyl groups, ethyl groups, propyl groups, butyl groups, isobutyl groups, pentyl groups, isopentyl groups, hexyl groups, octyl groups, decyl groups, dodecyl groups, octadecyl groups, cycloaliphatic groups, aromatic groups and groups comprising both aromatic and aliphatic groups.
- 70. (Original) A process according to Claim 69, wherein said cycloaliphatic groups are chosen from cyclohexyl groups.
- 71. (Original) A process according to Claim 69, wherein said aromatic groups are chosen from phenyl groups and naphthyl groups.
- 72. (Original) A process according to Claim 69, wherein said groups comprising both aromatic and aliphatic groups are chosen from benzyl groups, phenylethyl groups, tolyl groups and xylyl groups.
- 73. (Original) A process according to Claim 68, wherein said R<sup>4</sup> is chosen from groups of formula -(CO)<sub>c</sub>-R<sup>6</sup>, wherein c is equal to 1 and R<sup>6</sup> is chosen from a group comprising from 1 to 40 carbon atoms, optionally comprising at least one group chosen from NH2 groups, COOH groups and SO<sub>3</sub>H groups, wherein said group comprising from

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1 to 40 carbon atoms is chosen from an alkyl group, a cycloalkyl group and an aryl group.

74. (Original) A process according to Claim 68, wherein said  $R^4$  is chosen from groups of formula -(CO)<sub>c</sub>- $R^6$ , wherein c is equal to zero and R6 is chosen from phosphates and sulphates.

75. (Previously Presented) A process according to Claim 50, wherein said at least one silicone compound (b) is chosen from at least one derivative of formula:

in which:

- x and y, which may be identical or different, are each chosen from integers wherein said integers are chosen such that the number average molecular weight of said at least one silicone/acrylate copolymer ranges from 300 to 30,000;

- R<sup>1</sup>, which may be identical or different, are each chosen from C<sub>1</sub> to C<sub>2</sub> aliphatic hydrocarbons, C<sub>3</sub> to C<sub>20</sub> aromatic groups, C<sub>3</sub> to C<sub>20</sub> cycloaliphatic hydrocarbons, groups comprising both aromatic groups and aliphatic groups and groups of formula:

$$-(CH_2)_n - O = O = O = O = O$$

- in which:

- n is an integer ranging from 1 to 6;

- a and b, which may be identical or different, are each chosen from integers ranging from 0 to 50; and

-  $R^4$  is chosen from hydrogen,  $CH_3$ , groups of formula:

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$$\begin{bmatrix}
R^1 \\
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 \\
 \\
 X
\end{bmatrix}$$

$$\begin{bmatrix}
R^1 \\
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 \\
 \\
 X
\end{bmatrix}$$

$$\begin{bmatrix}
R^1 \\
 \\
 \\
 \\
 \\
 \\
 \\
 \\
 \\
 \\
 \\
 X
\end{bmatrix}$$

in which:

- x is an integer chosen such that the number average molecular weight of said at least one silicone/acrylate copolymer ranges from 300 to 30,000; and

-  $R^1$ , which may be identical or different, are each chosen from  $C_1$  to  $C_{20}$  aliphatic hydrocarbons,  $C_3$  to  $C_{20}$  aromatic groups,  $C_3$  to  $C_{20}$  cycloaliphatic hydrocarbons, groups comprising both aromatic groups and aliphatic groups and groups of formula:

in which:

- n is an integer ranging from 1 to 6;

- a and b, which may be identical or different, are each chosen from integers ranging from 0 to 50; and

- R4 is defined as above; and

groups of formula:

$$\begin{array}{c}
\begin{pmatrix} C \\ \parallel \\ C \\ \downarrow \\ R^6
\end{array}$$

in which:

-  $R^6$  is chosen from a  $C_1$  to  $C_{40}$  group, optionally comprising at least one group chosen from amino groups, carboxyl

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groups and sulfonyl groups, and, if c is equal to zero,  $R_6$  is chosen from an anion of an inorganic acid; and

- c is equal to 0 or 1; and

- R<sup>5</sup>, which may be identical or different, are each chosen from groups of formula:

$$-(CH2)n-O R4$$

in which:

- n is an integer ranging from 1 to 6;
- a and b, which may be identical or different, are each chosen from integers ranging from 0 to 50; and
- R4 is defined as above;

with the proviso that said at least one silicone derivative (b) comprises at least one oxyalkylene unit.

- 76. (Previously Presented) A process according to Claim 50, wherein said at least one silicone compound (b) is chosen from dimethicone copolyols and silicone surfactants.
- 77. (Previously Presented) A process according to Claim 50, wherein said at least one silicone compound (b) is present in a proportion ranging from 0.1% to 50% by weight relative to the total weight of said at least one silicone/acrylate copolymer.
- 78. (Previously Presented) A process according to Claim 77, wherein said at least one silicone compound (b) is present in a proportion ranging from 1 % to 20% by weight relative to the total weight of said at least one silicone/acrylate copolymer.
- 79. (Original) A process according to Claim 50, wherein said at least one silicone/acrylate copolymer is chosen from water-soluble silicone/acrylate copolymers and silicone/acrylate copolymers having a dispersibility in water is such that, in a water/ethanol mixture dosed at 50/50 by volume, said copolymers are soluble in a proportion of greater than 0.1 g/l.
- 80. (Original) A process according to Claim 79, wherein said silicone/acrylate copolymers have a dispersibility in water such that said copolymers are soluble in a proportion of greater than 0.2 g/l.

81. (Original) A process according to Claim 50, wherein said at least one silicone/acrylate copolymer is present in a proportion ranging from 0.1% to 20% by weight relative to the total weight of said composition.

82. (Original) A process according to Claim 81, wherein said at least one silicone/acrylate copolymer is present in a proportion ranging from 0.5% to 10% by weight relative to the total weight of said composition.

Claims 83-86 (Canceled).

- 87. (Original) A process according to Claim 50, wherein said at least one nonionic polymer comprising at least one vinyllactam unit has a number-average molecular mass greater than about 5000.
- 88. (Original) A process according to Claim 87, wherein said number-average molecular mass ranges from about 10,000 to about 1,000,000.
- 89. (Original) A process according to Claim 88 wherein said number-average molecular mass ranges from about 10,000 to about 100,000.
- 90. (Original) A process according to Claim 50, wherein said at least one nonionic polymer comprising at least one vinyllactam unit is present in a proportion ranging from 0.1% to 10% by weight relative to the total weight of said at least one silicone/acrylate copolymer.
- 91. (Original) A process according to Claim 90, wherein said at least one nonionic polymer comprising at least one vinyllactam unit is present in a proportion ranging from 0.2% to 5% by weight relative to the total weight of said at least one silicone/acrylate copolymer.
- 92. (Original) A process according to Claim 51, wherein said at least one cosmetically acceptable medium is chosen from water and cosmetically acceptable solvents.
- 93. (Original) A process according to Claim 92, wherein said cosmetically acceptable solvents are chosen from alcohols and mixtures comprising water and at least one solvent.
- 94. (Original) A process according to Claim 93, wherein said at least one solvent is chosen from  $C_1$ - $C_4$  alcohols.
- 95. (Original) A process according to Claim 94, wherein said C<sub>1</sub>-C<sub>4</sub> alcohol is chosen from ethanol and isopropanol.
- 96. (Original) A process according to Claim 95, wherein said C<sub>1</sub>-C<sub>4</sub> alcohol is chosen from ethanol.

97. (Original) A process according to Claim 50 further comprising at least one suitable additive chosen from anionic surfactants, cationic surfactants, nonionic surfactants, amphoteric surfactants, fragrances, screening agents, preserving agents, proteins, vitamins, polymers different from said at least one silicone/acrylate copolymer and different from said at least one nonionic polymer defined in Claim 50, plant oils, mineral oils and synthetic oils.

- 98. (Previously Presented) A process for making a cosmetic product comprising including in said product at least one composition comprising:
  - (a) at least one silicone/acrylate copolymer; and
- (b) at least one nonionic polymer comprising at least one vinyllactam unit chosen from polyvinylpyrrolidone/vinyl acetate/vinyl proprionate terpolymers,

wherein said at least one silicone/acrylate copolymer is derived from radical-mediated polymerization of:

- (i) at least one ethylenically unsaturated monomer (a); and
- (ii) at least one silicone compound (b) comprising at least one oxyalklyene group.
- 99. (Original) A process according to Claim 98, wherein said cosmetic product is a hair product.
- 100. (Original) A process according to Claim 99, wherein said hair product holds and shapes a hairstyle.
- 101. (Original) A process according to Claim 98, wherein said cosmetic product is a product for skin, a product for nails, a product for lips, a product for hair, a product for eyelashes.
- 102. (Previously Presented) A product for skin, a product for nails, a product for lips, a product for hair, a product for eyebrows or a product for eyelashes comprising:
  - (a) at least one silicone/acrylate copolymer; and
- (b) at least one nonionic polymer comprising at least one vinyllactam unit chosen from polyvinylpyrrolidone/vinyl acetate/vinyl proprionate terpolymers,

wherein said at least one silicone/acrylate copolymer is derived from radical-mediated polymerization of:

- (i) at least one ethylenically unsaturated monomer (a); and
- (ii) at least one silicone compound (b) comprising at least one oxyalklyene group.



# Evidence Appendix to Appeal Brief Under Rule 41.37(c)(1)(ix)

English language translation of WO 99/04750 to Blankenburg et al. used by

Appellant and the Examiner.

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# Related Proceedings Appendix to Appeal Brief Under Rule 41.37(c)(1)(x)

## Application No. 09/663,168 (Attorney Docket No. 05725.0754):

A Notice of Appeal was filed January 18, 2006, along with a Pre-Appeal Brief Review. A Notice of Panel Decision from Pre-Appeal Brief Review dated March 1, 2006, was sent informing Appellant to proceed to the Board of Patent Appeals and Interferences. An Appeal Brief for this related application is being filed on the same day as the instant brief.

A copy of the Notice of Panel Decision from Pre-Appeal Brief Review is attached.